DEPARTMENT: <u>CITY OF NORTH TONAWANDA</u>

CLASSIFICATION: <u>COMPETITIVE</u> APPROVED: <u>JANUARY 25, 2016</u>

### **SANITARY CHEMIST (North Tonawanda)**

**DISTINGUISHING FEATURES OF THE CLASS:** The work involves responsibility for maintaining required environmental and sanitary standards in the treatment of water and/or wastewater and for the determination of plant chemical treatment procedures which will produce the most efficient and effective results within plant design limitations. The work is performed under the general supervision of the Superintendent with considerable latitude permitted for the exercise of independent judgment in carrying out the technical aspects of the work. The incumbent supervises and participates in the physical, chemical, and bacteriological examination of water and/or wastewater. Supervision is exercised over the activities of subordinate laboratory personnel. Does related work as required.

#### TYPICAL WORK ACTIVITIES:

- 1. Plans and supervises the regular chemical, bacteriological and microscopic examination of raw and treated water or wastewater for compliance with regulatory agency requirements and efficient plant operations;
- 2. Plans, assigns, and reviews the work of subordinate laboratory personnel;
- 3. Supervises the operation and maintenance of scientific equipment used in advanced wastewater analysis and operates same;
- 4. Performs more difficult chemical, bacteriological and microscopic examinations of water and/or wastewater;
- 5. Instructs subordinates in proper laboratory procedures and in the care and use of laboratory equipment;
- 6. Reviews, analyzes, and interprets technical data and reports submitted by subordinates;
- 7. Oversees the analytical program, tests, and develops appropriate improvements;
- 8. Ensures the acceptable chemical and biological oxygen demand levels of plant effluent;
- a. Establishes and implements sample collection locations as appropriate;
- 9. Supervises the calibration, operation, maintenance and repair of laboratory and automatic sampling equipment;
- 10. Conducts research and special studies to increase plant efficiency and to obtain improved results;
- 11. Confers regularly with the Chief Operator regarding ongoing operations and problems encountered;
- 12. Keeps informed on the latest developments in sanitary chemistry and microbiology by the study of professional literature;
- 13. Controls inventory of laboratory materials and supplies, requisitions needed supplies, and prepares budgetary requests for laboratory operation and for chemical supplies required for treatment process;
- 14. Maintains accurate records, provides plant analytical data, and assists the Chief Operator and Superintendent in submitting required reports to Federal, State, and local agencies to ensure plant compliance with permit requirements;
- 15. Maintains quality control of all laboratory procedures according to Federal and State regulatory agency guidelines;
- 16. Confers with governmental officials, industry representatives, and other interested parties in regard to water and/or wastewater treatment matters;
- 17. Attends laboratory related courses, workshops, seminars, etc., and participates in in-service training of plant personnel;
- 18. Supervises the City's Industrial Pre-Treatment Program including sample collection, laboratory analysis of samples, and inspection of sampling sites and preparing of reports;
- 19. Supervises and monitors the Plant's EPA waste chemical program.

# FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of modern laboratory principles, practices, techniques, terminology, equipment and safety precautions; thorough knowledge of the modern practices, techniques, and equipment used in the physical, chemical and bacteriological analysis of water and wastewater; a high degree of technical skill in the operation and care of modern laboratory equipment and apparatus; ability to plan for, train and supervise others in the methodology of sanitary chemistry procedures; thoroughness, accuracy; physical condition commensurate with the demands of the position.

# **CONTINUED**

# **SANITARY CHEMIST (North Tonawanda) CONTINUED**

# **MINIMUM QUALIFICATIONS:**

Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a Bachelors degree in environmental science, chemistry, physics or biology including twenty-four (24) semester hours of chemistry **and** two (2) years of experience in sanitary chemistry or in performing technical analysis in an environmental laboratory including tests involving wastewater and/or drinking water analysis; **OR** 

Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with an Associates degree in laboratory technology, environmental science, chemistry, physics, or biology including twenty-four (24) hours of chemistry **and** four (4) years of experience in sanitary chemistry or in performing technical analysis in an environmental laboratory including tests involving wastewater and/or drinking water analysis.